AMENDMENTS TO THE CLAIMS:

Please add Claims 132 through 144 as follows:

1 – 60. (Cancelled)

61. (Previously Presented) In an optical scanner having a source of a light beam, a deflector for deflecting said light beam and an imaging lens that focuses the deflected light beam to form a beam spot on a surface to be scanned, the improvement wherein the curvatures in a sub-scanning direction of two of the surfaces of said imaging lens vary continuously along a main scanning direction over the effective area of said imaging lens and independently of the curvatures in the main scanning direction, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to the optical axis.

62. (Previously Presented) An optical scanner according to claim 61, wherein the optical magnification of said imaging lens in the sub-scanning direction is constant over the effective scanning region.

63. (Previously Presented) An optical scanner according to claim 61, wherein said imaging lens is a single lens.

64. (Previously Presented) An optical scanner according to claim 63, wherein said imaging lens satisfies the following requirement:

the entrance face of said imaging lens has a cross section taken in the sub-scanning direction which is concave at the center of scanning and convex at either end of scanning.

65. (Previously Presented) An optical scanner according to claim 64, wherein said imaging lens has a surface that is aspheric in the main scanning direction.

66. (Previously Presented) An optical scanner according to claim 65, wherein said imaging lens has a surface having a point of inflection in the main scanning direction.

67. (Withdrawn) An optical scanner according to claim 65, wherein said light source has a plurality of light-emitting portions.

68. (Withdrawn) An optical scanner according to claim 67, wherein that element of the imaging lens which has such a surface that the curvature in the sub-scanning direction varies continuously along the main scanning direction over the effective area of said imaging lens is made of plastic.

69. (Previously Presented) An optical scanner according to claim 61, wherein said imaging lens has a surface that is aspheric in the main scanning direction.

70. (Previously Presented) An optical scanner according to claim 69, wherein said imaging lens has a surface having a point of inflection in the main scanning direction.

71. (Withdrawn) An optical scanner according to claim 61, wherein said light source has a plurality of light-emitting portions.

72. (Withdrawn) An optical scanner according to claim 71, wherein that element of the imaging lens which has such a surface that the curvature in the sub-scanning direction varies continuously along the main scanning direction over the effective area of said imaging lens is made of plastic.

73. (Previously Presented) An optical scanner according to claim 62, wherein said imaging lens is a single lens.

74. (Previously Presented) An optical scanner according to claim 73, wherein said imaging lens satisfies the following requirement:

the entrance face of said imaging lens has a cross section taken in the sub-scanning direction which is concave at the center of scanning and convex at either end of scanning.

75. (Previously Presented) An optical scanner according to claim 74, wherein said imaging lens has a surface that is aspheric in the main scanning direction.

76. (Previously Presented) An optical scanner according to claim 75, wherein said imaging lens has a surface having a point of inflection in the main scanning direction.

77. (Withdrawn) An optical scanner according to claim 75, wherein said light source has a plurality of light-emitting portions.

78. (Withdrawn) An optical scanner according to claim 77, wherein that element of the imaging lens which has such a surface that the curvature in the sub-scanning direction varies continuously along the main scanning direction over the effective area of said imaging lens is made of plastic.

79-116. (Cancelled)

117. (Previously Presented) In an optical scanner having a source of a light beam, a deflector for deflecting the light beam and an imaging lens system for focusing the light beam deflected by said deflector to form a beam spot on a surface to be scanned, the improvement wherein curvatures in a sub-scanning direction of two surfaces of said imaging lens system vary continuously along a main scanning direction over an effective area of said imaging lens system and independently of curvatures in the main scanning direction, and wherein curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

118. (Previously Presented) In an optical scanner having a source of a light beam, a deflector for deflecting the light beam and an imaging lens system for focusing the light beam deflected by said deflector to form a beam spot on a surface to be scanned, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system and independently of curvatures in the main scanning direction, and wherein the curvatures in the main and

sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

119. (Previously Presented) In an optical scanner having a source of a light beam, a deflector for deflecting the light beam and an imaging lens system for focusing the light beam deflected by said deflector to form a beam spot on a surface to be scanned, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system and independently of curvatures in the main scanning direction to provide a substantially constant optical magnification in the sub-scanning direction over the effective scanning region, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

120. (Withdrawn) In an optical scanner having light source means for emitting a plurality of light beams, a deflector for deflecting the light beams and an imaging lens system for focusing the light beams deflected by said deflector to form beam spots on a surface to be scanned, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system and independently of curvatures in the main scanning direction, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

121. (Withdrawn) In an optical scanner having light source means for emitting a plurality of light beams, a deflector for deflecting the light beams and an imaging lens system for focusing the light beams deflected by said deflector to form beam spots on a surface to be scanned, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system and independently of curvatures in the main scanning direction to provide a substantially constant optical magnification in the sub-scanning direction over the effective scanning region, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

122. (Previously Presented) In an optical scanner having a source of a light beam, a rotatable polygonal mirror for deflecting the light beam and an imaging lens system for focusing the light beam deflected by said polygonal mirror to form a beam spot on a surface to be scanned, wherein the light beam is incident on the polygonal mirror in a direction inclined relative to an optical axis of said imaging lens system in the main scanning plane, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system and independently of curvatures in the main scanning direction, and wherein the curvatures in the sub-scanning direction are non-symmetrical with respect to a sub-scanning plane including the optical axis, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

123. (Withdrawn) In an optical scanner having light source means for emitting a plurality of light beams, a rotatable polygonal mirror for deflecting the light beams and an imaging lens system for focusing the light beams deflected by said deflector to form beam spots on a surface to be scanned, wherein the light beams are incident on the polygonal mirror in the main scanning plane in directions inclined relative to an optical axis of said imaging lens system, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system, and wherein the curvatures in the sub-scanning direction are non-symmetrical with respect to a sub-scanning plane including the optical axis, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

124. (Withdrawn) In an optical scanner having light source means for emitting a plurality of light beams, a deflector for deflecting the light beams and an imaging lens system for focusing the light beams deflected by said deflector to form beam spots on a surface to be scanned, the improvement wherein said imaging lens system comprises a plurality of surfaces having curvatures in a sub-scanning direction which vary continuously along a main scanning direction over an effective area of said imaging lens system to provide a substantially constant optical magnification in the sub-scanning direction over the effective scanning region, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to an optical axis of said imaging lens system.

125. (Previously Presented) An optical scanner according to any one of Claims 117, 118, 120, 122, and 123, wherein the optical magnification of said imaging lens system in the sub-scanning direction is constant over the effective scanning region.

126. (Previously Presented) An optical scanner according to any one of Claims 117-124, wherein said imaging lens system has only one lens.

127. (Previously Presented) An optical scanner according to Claim 126, wherein said imaging lens system satisfies the following requirement:

an entrance face of said imaging lens has a cross section taken in the sub-scanning direction which is concave at the center of the scanning region and convex at either end of the scanning direction.

128. (Previously Presented) An optical scanner according to any one of Claims 117-124, wherein said imaging lens system has a surface that is aspheric in the main scanning direction.

129. (Previously Presented) An optical scanner according to Claim 128, wherein said imaging lens system has a surface having a point of inflection in the main scanning direction.

130. (Previously Presented) An optical scanner according to any one of Claims 117-124, wherein that element of the imaging lens which has such a surface that the

curvature in the sub-scanning direction varies continuously along a main scanning direction over an effective area of said imaging lens system is made of plastic.

131. (Previously Presented) In an optical scanner having a source of a light beam, a deflector for deflecting said light beam and an imaging lens that focuses the deflected light beam to form a beam spot on a surface to be scanned, the improvement wherein the curvatures in a sub-scanning direction of two of the surfaces of said imaging lens can be defined as functions of variables not including curvatures in a main scanning direction over the effective area of said imaging lens, and wherein the curvatures in the main and sub-scanning directions are rotationally non-symmetrical with respect to the optical axis.

132. (New) In an optical scanner having a source of a light beam, a deflector for deflecting said light beam and an imaging lens that focuses the deflected light beam to form a beam spot on a surface to be scanned, the improvement wherein the curvatures in a sub-scanning direction of two of the surfaces of said imaging lens vary continuously along a main scanning direction over the effective area of said imaging lens and independently of the curvatures in the main scanning direction, and

wherein one of the following conditions is satisfied: (a) the curvatures in the main and sub-scanning direction of a surface of said imaging lens are non-symmetrical with respect to the optical axis; and (b) the curvatures in the sub-scanning direction of the two surfaces of said imaging lens are non-symmetrical with respect to the optical axis.

133. (New) In an optical scanner having a source of a light beam, a deflector for deflecting said light beam and an imaging lens that focuses the deflected light beam to form a beam spot on a surface to be scanned, the improvement wherein the curvatures in a sub scanning direction of at least two of the surfaces of said imaging lens vary continuously along a main scanning direction over the effective area of said imaging lens and independently of the curvatures in the main scanning direction, and wherein the curvatures in the main and sub scanning directions are non symmetrical with respect to the optical axis.

134. (New) An optical scanner according to claim 133, wherein the optical magnification of said imaging lens in the sub scanning direction is constant over the effective scanning region.

135. (New) An optical scanner according to claim 133 or 134, wherein said imaging lens is a single lens.

136. (New) An optical scanner according to claim 135, wherein said imaging lens satisfies the following requirement:

the entrance face of said imaging lens has a cross section taken in the sub scanning direction which is concave at the center of scanning and convex at either end of scanning.

137. (New) An optical scanner according to claim 136, wherein said imaging lens has a surface that is aspheric in the main scanning direction.

138. (New) An optical scanner according to claim 137, wherein said imaging lens has a surface having a point of inflection in the main scanning direction.

139. (New) An optical scanner according to claim 137, wherein said light source has a plurality of light emitting portions.

140. (New) An optical scanner according to claim 139, wherein that element of the imaging lens which has such a surface that the curvature in the sub scanning direction varies continuously along the main scanning direction over the effective area of said imaging lens is made of resin.

141. (New) An optical scanner according to claim 133, wherein said imaging lens has a surface that is aspheric in the main scanning direction.

142. (New) An optical scanner according to claim 141, wherein said imaging lens has a surface having a point of inflection in the main scanning direction.

143. (New) An optical scanner according to claim 133, wherein said light source has a plurality of light emitting portions.

144. (New) An optical scanner according to claim 143, wherein that element of the imaging lens which has such a surface that the curvature in the sub scanning direction varies continuously along the main scanning direction over the effective area of said imaging lens is made of resin.